UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,358	12/22/2003	Randy Zimler	01098	9330
³⁸⁵¹⁶ AT&T Legal D	7590 07/20/201 epartment - SZ	0	EXAM	IINER
Attn: Patent Do			LOO, JU	VENA W
Room 2A-207 One AT&T Wa	y		ART UNIT	PAPER NUMBER
Bedminster, NJ	07921		2473	
			MAIL DATE	DELIVERY MODE
			07/20/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/743,358	ZIMLER ET AL.
Office Action Summary	Examiner	Art Unit
	JUVENA LOO	2473
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	NATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 17 J This action is FINAL . 2b) ☐ This action is FINAL . Since this application is in condition for allowated closed in accordance with the practice under B	s action is non-final. ince except for formal matters, pro	
Disposition of Claims		
4) Claim(s) 1-15 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1-15 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomposite and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct	er. cepted or b) objected to by the led trawing(s) be held in abeyance. See the drawing(s) is objected to by the led to be drawing(s) is objected to be drawing(e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicati prity documents have been receive uu (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date June 17, 2010.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate

Art Unit: 2473

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Application/Control Number: 10/743,358

Art Unit: 2473

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Page 3

2. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of Application No. 11/223604. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Application Number: 10/743358	Application Number: 11/223604
1. A method of providing communications	1 A method of providing communications
services, comprising:	services, comprising:
receiving a request for communications	receiving a request for data from a
service from the residential gateway in the	residential gateway in a customer's
subscriber's premises;	premises;
logically bonding a first physical medium to	logically bonding a first physical medium to
a residential gateway in a_subscriber's	the residential gateway;
premises;	
connecting the second physical medium to	temporarily dedicating and logically
another residential gateway in another	bonding a second physical medium to the
subscriber's premises;	residential gateway, the second physical
sharing the second physical medium	medium physically connected to multiple
amongst the subscriber's premises and the	residential gateways in other customers'
another subscriber's premises;	premises;
providing the requested communications	providing the data via the logically bonded

Art Unit: 2473

service via the logically bonded first	first physical medium and the second
physical medium and the temporarily	physical medium to the residential
dedicated and logically bonded second	gateway;
physical medium;	
	determining that the request for data
	exceeds a combined maximum bit rate for
	the logically bonded first physical medium
	and the second physical medium;
	invoking a feedback mechanism that prompts the residential gateway to select other content;
reverting the second physical medium to	reverting the second physical medium to
its shared configuration, thus allowing the	its shared configuration when the
another residential gateway to receive	additional bandwidth is no longer needed
increased bandwidth when required	to allow another residential gateway to
	receive increased bandwidth.

3. Claim 15 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of Application No. 11/223604. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Application Number: 10/743358	Application Number: 11/223604	
15. A method of providing communications	1 A method of providing communications	
services, comprising:	services, comprising:	

Art Unit: 2473

receiving a request for communications	receiving a request for data from a	
service from a residential gateway in the	residential gateway in a customer's	
customer's premises;	premises;	
logically bonding a first physical medium to	logically bonding a first physical medium to	
the residential gateway;	the residential gateway;	
temporarily dedicating and logically	temporarily dedicating and logically	
bonding a second physical medium to the	bonding a second physical medium to the	
residential gateway, the second physical	residential gateway, the second physical	
medium being dynamically dedicated and	medium physically connected to multiple	
shared amongst multiple residential	residential gateways in other customers'	
gateways to provide additional bandwidth	premises;	
when required;		
providing the communications service via	providing the data via the logically bonded	
the logically bonded first physical medium	first physical medium and the second	
and the second physical medium;	physical medium to the residential	
	gateway;	
	determining that the request for data	
	exceeds a combined maximum bit rate for	
	the logically bonded first physical medium	
	and the second physical medium;	
	invoking a feedback mechanism that	
	prompts the residential gateway to select	
	other content;	
when the additional bandwidth is no longer	reverting the second physical medium to	
needed, reverting the second physical	its shared configuration when the	
medium to its shared configuration, thus	additional bandwidth is no longer needed	
allowing the another residential gateway to	to allow another residential gateway to	
receive increased bandwidth when	receive increased bandwidth.	
L		

Art Unit: 2473

required	

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Grant et al. (US 7,142,503 B1).

Regarding claim 1, a method of providing communications services, comprising:

logically bonding a first physical medium to a residential gateway in a subscriber's premises (Grant: see Figure 1 and column 6, line 50 – column 7, line 8; see also column 7, lines 48 - 64; each serviceable location (household or office

environment) 14 – 28 including a home-gateways or XDSL modem is connected to network 12);

connecting a second physical medium to the residential gateway in a subscriber's premises (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN));

connecting the second physical medium to another residential gateway in another subscriber's premises (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN));

sharing the second physical medium amongst the subscriber's premises and the another subscriber's premises (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN));

receiving a request for communications service from the <u>residential gateway in</u>
the subscriber's premises (Grant: see Figure 4 steps 204 – 206 and column 11, lines 6
– 7);

when the requested communications service exceeds an available bandwidth of the first physical medium, then temporarily dedicating and logically bonding the second physical medium to the residential gateway in the subscriber's premises to provide additional bandwidth, such that first physical medium and the second physical medium share a session of information (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 - 54);

providing the requested communications service via the logically bonded first physical medium and the temporarily dedicated and logically bonded second physical medium (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 - 64); and

when the additional bandwidth is no longer needed, removing the temporary dedicated and logical bonding of the second physical medium (Grant: see Figure 4 and column 11, lines 1 – 26); and

reverting the second physical medium to its shared configuration, thus allowing the another <u>residential gateway</u> to receive increased bandwidth when required (Grant: see Figure 4 and column 11, lines 1 - 26; see also column 13, lines 35 - 54; see also Figure 3 and column 10, lines 4 - 26; see also column 4, lines 53 - 64).

Regarding claim 2, wherein logically bonding the first physical medium comprises logically bonding a twisted pair (Grant: see column 7, lines 9 – 12).

Regarding claim 3, wherein logically bonding the first physical medium comprises logically bonding a coaxial cable (Grant: see column 6, line 60 – column 7, line 12).

Regarding claim 4, wherein logically bonding the first physical medium comprises logically bonding a fiber optic cable (Grant: see column 6, line 60 – column 7, line 12).

Regarding claim 5, wherein providing the requested communications service comprises transmitting signals via at least one of i) a combination of a twisted pair and a coaxial cable, ii) a combination of a twisted pair and a fiber optic cable, and iii) a combination of a coaxial cable and a fiber optic cable (Grant: see column 6, line 60 – column 7, line 12).

Regarding claim 6, further comprising temporarily dedicating and logically bonding additional physical media to the residential gateway, each additional physical media dynamically shared with the another residential gateway to provide additional bandwidth (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 - 64).

Regarding claim 7, providing the requested communications service comprises transmitting signals via a shared twisted pair (Grant: see Figure 1 and column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 7, lines 9 – 12;

each serviceable location (household or office environment) 14 – 28 including a homegateways or XDSL modem is connected to network 12).

Regarding claim 8, further comprising temporarily dedicating and logically bonding n physical media to the residential gateway, such that first physical medium and the n physical media share the same session of information (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 – 64; there can be more than one secondary paths through the virtual neighborhood network (VNN) to provide the additional resources required).

Regarding claim 9, a method of providing communications services, comprising:

configuring a first twisted pair to provide Digital Subscriber Line service to a

residential gateway in a subscriber's premises (Grant: see Figure 1 and column 6, line

50 – column 7, line 8; see also column 7, lines 48 - 64; see also column 7, lines 9 – 12;

each serviceable location (household or office environment) 14 – 28 including a homegateways or XDSL modem is connected to network 12);

configuring a second twisted pair for shared Digital Subscriber Line service amongst the residential gateway and another residential gateway in another subscriber's premises (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see

also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN));

receiving a request for communications service from the residential gateway (Grant: see Figure 4 steps 204 – 206 and column 11, lines 6 – 7);

transmitting digital subscriber line signals to the residential gateway via the first twisted pair (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 - 54);

when the requested communications service exceeds an available bandwidth of the first twisted pair, then temporarily dedicating and logically bonding the second twisted pair to the residential gateway to provide additional bandwidth (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 - 54);

providing the requested communications service via the logically bonded first twisted pair and the temporarily dedicated and logically bonded second twisted pair (Grant: see Figure 4 and column 11, lines 1 - 26; see also column 13, lines 35 - 54; see also Figure 3 and column 10, lines 4 - 26; see also column 4, lines 53 - 64); and

when the additional bandwidth is not needed, removing the temporary logical bonding of the second twisted pair from the residential gateway (Grant: see Figure 4 and column 11, lines 1-26); and

reverting the second twisted pair to its shared configuration, thus allowing the another residential gateway in the another subscriber's premises to receive increased bandwidth when required (Grant: see Figure 4 and column 11, lines 1 – 26; see also

column 13, lines 35 - 54; see also Figure 3 and column 10, lines 4 - 26; see also column 4, lines 53 - 64).

Regarding claim 10, further comprising sharing the same session of information (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN)).

Regarding claim 11, further comprising connecting the second twisted pair and the first twisted pair to the residential gateway, such that first twisted pair and the second twisted pair share the same session of information (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN)).

Regarding claim 12, further comprising transmitting the digital subscriber line signals to the residential gateway via a third dedicated twisted pair, the third dedicated twisted pair shared amongst the residential gateway in the subscriber's premises and the another residential gateway in the another subscriber's premises, the third twisted pair providing more additional bandwidth (Grant: see Figure 4 and column 11, lines 1 –

26; see also column 13, lines 35 - 54; see also Figure 3 and column 10, lines 4 - 26; see also column 4, lines 53 - 64; there can be more than one secondary paths through

the virtual neighborhood network (VNN) to provide the additional resources required).

Regarding claim 13, further comprising instructing a network device to logically

bond the second twisted pair and the first twisted pair when transmitting the digital

subscriber line signals to the subscriber's premises, such that first twisted pair and the

second twisted pair share the same session of information (Grant: see column 4, lines

52 - 64).

Regarding claim 14, further comprising dedicating and logically bonding n twisted

pairs to the first twisted pair when transmitting the digital subscriber line signals to the

residential gateway, such that first twisted pair and the n twisted pairs share the same

session of information (Grant: see Figure 4 and column 11, lines 1 - 26; see also

column 13, lines 35 - 54; see also Figure 3 and column 10, lines 4 - 26; see also

column 4, lines 53 - 64; there can be more than one secondary paths through the

virtual neighborhood network (VNN) to provide the additional resources required).

Regarding claim 15, a method of providing communications services,

comprising:

receiving a request for communications services from a residential gateway in a

customer's premises (Grant: see Figure 4 steps 204 – 206 and column 11, lines 6 – 7);

logically bonding a first physical medium to the residential gateway (Grant: see Figure 1 and column 6, line 50 – column 7, line 8; see also column 7, lines 48 - 64; each serviceable location (household or office environment) 14 – 28 including a homegateways or XDSL modem is connected to network 12);

temporarily dedicating and logically bonding a second physical medium to the residential gateway, the second physical medium being dynamically dedicated and shared amongst multiple residential gateways to provide additional bandwidth when required (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN));

providing the communications services via the logically bonded first physical medium and the second physical medium (Grant: see Figures 1 and 3; column 6, line 50 - column 7, line 8; see also column 7, lines 48 - 64; see also column 8, lines 3 - 22 and lines 36 - 45; see also Figure 4 and column 11, lines 1 - 26; see also column 13, lines 35 - 54; various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN)); and

when the additional bandwidth is no longer needed, reverting the second physical medium to its shared configuration, thus allowing another residential gateway to receive increased bandwidth when required (Grant: see Figure 4 and column 11,

Art Unit: 2473

lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines

4 – 26; see also column 4, lines 53 - 64).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JUVENA LOO whose telephone number is (571)270-

1974. The examiner can normally be reached on Monday - Friday: 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kwang Yao can be reached on (571) 272-3182. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JUVENA LOO Examiner

Art Unit 2473

Art Unit: 2473

July 15, 2010

/KWANG B. YAO/ Supervisory Patent Examiner, Art Unit 2473